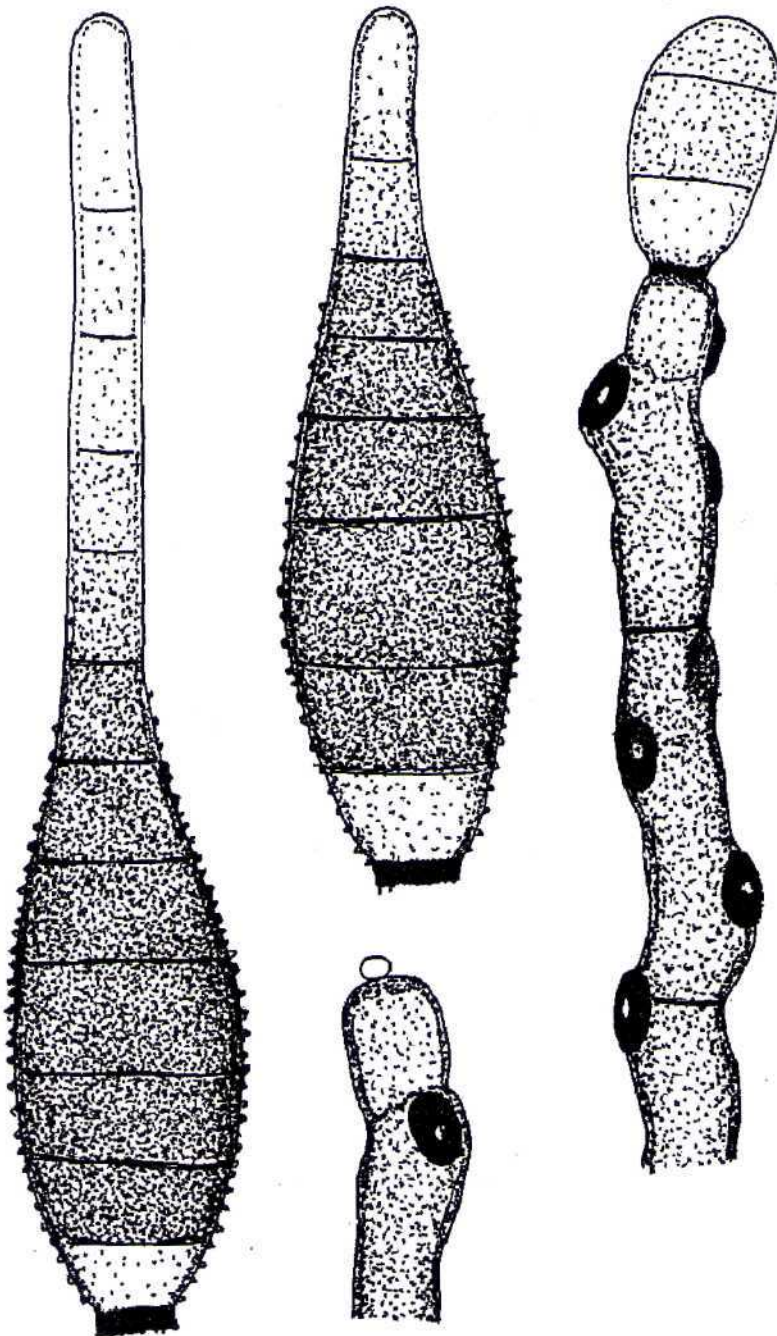




A JOURNAL ON TAXONOMIC BOTANY,  
PLANT SOCIOLOGY AND ECOLOGY



**REINWARDTIA**

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# REINWARDTIA

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## **Editors**

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## A NEW JAVANESE SPECIES OF MARASMIUS (TRICHOLOMATACEAE)

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### ABSTRACT.

RETNOWATI, A. 2008. A new Javanese species of *Marasmius* (Tricholomataceae). *Reinwardtia* 12(4): 335 – 336. — *Marasmius xenopellis* is described as a new species based on material collected from Mt. Halimun National Park, West Java.

**Keywords:** *Marasmius xenopellis*, Mt. Halimun National Park, Java

### ABSTRAK

RETNOWATI, A. 2008. Suatu jenis baru dari marga *Marasmius* (Tricholomataceae) dari Jawa. *Reinwardtia* 12(4): 335 – 336. — *Marasmius xenopellis* dipertelakan sebagai jenis baru berdasarkan material yang dikoleksi dari Taman Nasional Gunung Halimun, Jawa Barat.

**Kata Kunci:** *Marasmius xenopellis*, Taman Nasional G. Halimun, Jawa

### INTRODUCTION

During a fieldwork to Mt. Halimun National Park, West Java (Indonesia), an interesting collection of a species of *Marasmius* was made, which at first sight appeared to belong to section *Globulares*, but upon further closer examination revealed that it had also *Siccus*-type pileipellis. It seems that the present species is allied with another species that has intermediate pileipellis type, viz. *Marasmius nexus* Desjardin & Horak from Papua New Guinea (Desjardin & Horak 1997) which they placed in section *Sicci*. The latter species differs in forming smaller basidiomata (pileus 10–50 mm, stipe 20–75 x 1.5–3 mm) and smaller basidiospores (5.5–8 x 2.5–3 µm).

Since the combination of these macroscopic and microscopic characters cannot be matched with any described taxa, this collection is proposed to be made the type specimen of a new species.

*Marasmius xenopellis* Retnowati, spec. nov. — Fig. 1.

Pileus 43–87 mm latus, convexus ad umbonatus, sulcatus, glabrus. Lamellae adnexae, subdistantes, brunneus marginatae. Stipe 135–195 x 4–6 mm, eccentricus, aequalis, pruinosis, ad basim tomento albo. Odor saporque nulli. Basidiosporae (10.4)11.2–12 x (5.6)6.4–7.2(8) µm, ellipsoideae, leves, hyalinae, inamyloideae, tenui-tunicatae. Cheilocystidia a) Cellulae typi *Sicci*, 5.6–32 x 4.8–8 µm, setulosae, cylindricae, 2–4 setulae ad apicem 5.6–17.6 x 2.4–3.2 µm, crasse-tunicatae; b) Cheilostetae 32–144 x 2.4–5.6 µm.

Pleurocystidia raras, 8–16 x 3.2–4 µm, cylindricae. Pileipellis hymeniformis, a) polymorphicae (clavatae, pyriformae vel subglobosae), 12–17.6 x 9.6–16 µm; b) cellulae typi *Sicci*, 9.6–14.4 x 4.8–9.6 µm, crasse-tunicatae; c) Setae 9.6–14.4 x 1.6 µm. Trama pilei irregulare. Stipes cellulis typi *Sicci* et caulosetis obtectus. Fibulae presentes. Gregarius ad terram. Holotypus: Indonesia, Jawa, West Java, Mt. Halimun National Park, 8 July 2000, A. Retnowati 288 (BO).

Pileus 43–87 mm diameter, convex with broad umbo, sulcate, hygrophanous; margin crenate, straight to wavy; surface moist, wrinkle, glabrous; pale brown to brown (6–E7) (Kornerup & Wanscher 1978). Context moderately thick up to 2 mm, off-white. Lamellae adnexed, subdistant (16–18 reaching stipe) with 1 series of lamellulae; brown marginated, up to 11 mm breadth; pale brown. Stipe 135–195 x 4–6 mm, eccentric, equal, hollow, central, smooth, pruinose mostly at the apex; reddish brown; with a very thick white tomentose base. Odor and taste not distinctive. Basidiospores (10.4)11.2–12 x (5.6)6.4–7.2(8) µm, ellipsoid, thin-walled, hyaline, inamyloid. Basidia unobserved. Basidioles unobserved. Cheilocystidia abundant in the form of 1) *siccus*-type broom cells with 2–4 setulae; main body 5.6–32 x 4.8–8 µm, cylindrical, thick-walled; setulae 5.6–17.6 x 2.4–3.2 µm, cylindrical, thick-walled, yellowish brown.; 2) setae with pointed apex, 32–144 x 2.4–5.6 µm, thick-walled, yellowish brown. Pleurocystidia uncommon, 8–16 x 3.2–4 µm, cylindrical, capitate, thick-walled, perpendicular, yellowish brown. Pileipellis hymeniform, composed of 1) *globulares*-type, smooth cells, clavate to broadly clavate, pyriform or subglobose

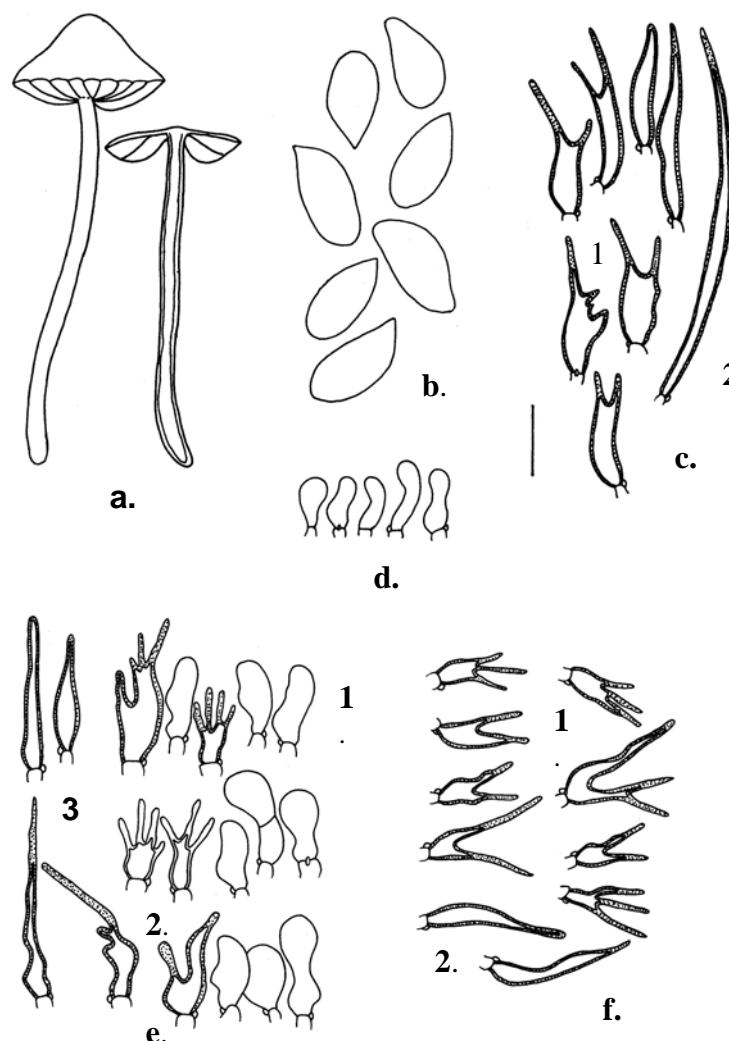


Fig. 1. *Marasmius xenopellis* (A. Retnowati 288, Holotype): a. Basidiomes (1/2 x); b. Basidiospores; c. Cheilocystidia: 1. *Siccus*-type cheilocystidia; 2. Cheiloseetae; d. Pleurocystidia; e. Pileipellis: 1. *Globulares*-type of pileipellis; 2. *Siccus*-type of pileipellis; 3. Pileosetae. f. Stipe vestiture: 1. *Siccus*-type caulocystidia; 2. Caulosetae. Scale bar = 12  $\mu$ m for figure b and scale bar = 15.7  $\mu$ m for figures c, d, e and f.

cells, thin-walled, 12–17.6 x 9.6–16  $\mu$ m, hyaline to yellowish brown; 2). *Siccus*-type broom cells with 2–4 setulae; main body 9.6–14.4 x 4.8–9.6  $\mu$ m, cylindrical, thick-walled; setulae 9.6–14.4 x 1.6  $\mu$ m, cylindrical, thick-walled, yellowish brown; 3) setae with pointed apex, 20–30.4  $\mu$ m long, thick-walled, yellowish brown. Pileus trama irregular, 3.2–12  $\mu$ m diam, hyaline to yellowish brown. Stipe tissue monomitic; cortical hyphae 4.8–13.6  $\mu$ m diam, parallel, cylindrical, dextrinoid, yellowish brown; medullary hyphae 5.6–8.8  $\mu$ m diam, parallel, hyaline, thin-walled, strongly dextrinoid. Stipe vestiture common, composed of numerous *siccus*-type broom cells and caulosetae; *siccus*-type broom cells similar to those of cheilocystidia; main body 15.2–38.4 x 2.4–4  $\mu$ m, irregular shaped, cylindrical, thin-walled to thick-walled,

yellowish brown; setulae 5.6–16.8 x 1.6–2.4  $\mu$ m, irregular, cylindrical, clavate, with pointed apex; caulosetae often present at the upper part of stipe, 29.1–31.4  $\mu$ m, lanceolate to fusoid-ventricose, acute, dextrinoid, thick-walled, pale yellow. Clamp connection present.

**HABIT, HABITAT AND DISTRIBUTION.** Gregarious on soil of mountain forest in West Java.

**SPECIMEN EXAMINED.** Indonesia: Java, West Java, Mt. Halimun National Park, 8 July 2000, A. Retnowati 288.

ETYMOLOGY. – xeno (L.): strange; pellis (L.): pileipellis, referring to the presence of two types of pileipellis, *Globulares* and *Siccus*- types.

#### ACKNOWLEDGEMENT

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